

## ABSTRACT FOR THE EGS 2000, Nice, April 2000

1. PS4 The Jovian and Saturnian systems: surfaces and atmospheres
2. First Submission
3. CASSINI/HUYGENS OVERVIEW AND MISSION STATUS
4. Authors: MATSON, D.; LEBRETON, J-P
5. 02 The Cassini/Huygens mission to Saturn and Titan
6. Convener: J.-P. Lebreton (Noordwijk, The Netherlands), Co-Convener: D. L. Matson (Pasadena, CA)
7. Standard.
8. NONE
9. ORAL
10. WORD97, ATTACHED
11. Matson  
Dennis L  
Cassini Project Scientist  
JPL  
4800 Oak Grove Drive  
Pasadena, CA 91109  
USA  
818 354-2253  
FAX 818 393-4495  
[dmatson@jpl.nasa.gov](mailto:dmatson@jpl.nasa.gov)

## CASSINI/HUYGENS OVERVIEW AND MISSION STATUS

D. L. Matson (1), J.-P. Lebreton (2)

(1) Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA 91106, USA, (2) Space Science Dept. of ESA, ESTEC, P. O. Box 299, 2200 AG Noordwijk, The Netherlands

The Cassini/Huygens mission is designed to carry out an in-depth exploration of Titan and the Saturnian system. The spacecraft started its interplanetary journey on October 15, 1997, with a launch by the Titan-4 Centaur system. Swingbys of Venus occurred on April 26, 1998 and June 24, 1999. The closest approach to the Earth was on August 18, 1999 as Cassini/Huygens transited the Earth-Moon system and the Earth's magnetosphere. Scientific data were obtained on these flybys. The spacecraft is in excellent condition, with most of its systems and instruments having been exercised. Preparations are underway for observations to be made during the flyby of Jupiter at the end of December 2000. Upon arrival at Saturn, Cassini/Huygens will go into orbit about the planet. The Orbiter will deliver the Huygens probe to Titan in November, 2004. After deceleration in the upper atmosphere, Huygens will deploy a parachute system and its six instruments will make scientific measurements and observations as it descends to the surface. The Orbiter will then commence a four year long tour of the Saturnian system. With its complement of 12 instruments, Cassini is capable of making a wide range of in situ and remote sensing observations. Over the course of the mission, Cassini will also record temporal changes in many of the properties that it can observe. The Cassini mission is a joint undertaking by NASA and ESA. The JPL portion of this work has been carried out under contract with NASA.